REMARKS

Claims 1-51 are active in the present application. Claims 1-26 have been amended to remove multiple dependencies and for clarity. New Claims 27-51 are supported by the original Claims 1-26. No new matter is added. An action on the merits and allowance of Claims is solicited.

Respectfully submitted,

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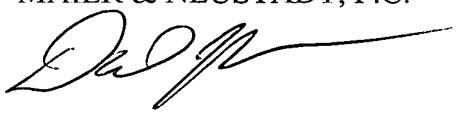

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IN THE CLAIMS

Please amend the claims as follows:

--1. (Amended) Structured surface having ultraphobic properties, [characterized in that] comprising a surface topography in which the value of the integral of a function S

$$S(\log f) = a(f) \cdot f \qquad (1),$$

which gives a relationship between the spatial frequencies [f] F of the individual Fourier components and their amplitudes a(f), is at least 0.5 between the integration limits $\log(f_1/\mu m^{-1}) = -3$ and $\log(f_2/\mu m^{-1}) = 3$, and consists of a hydrophobic or, in particular, oleophobic material, or is coated with a hydrophobic or, in particular, oleophobic material.

2. (Amended) Surface according to Claim 1, [characterized in that] wherein the integral is > 0.6.

3. (Amended) Ultraphobic surface according to Claim 1 [or 2, characterized in that it] wherein said structured surface has a contact angle of at least 150° and a roll-off angle of <10°.

4. (Amended) Ultraphobic surface according to [one of Claims 1 to 3, characterized in that it] Claim 1, wherein said structured surface has a contact angle of at least 155°.

5. (Amended) Ultraphobic surface according to [one of Claims 1 to 4, characterized in that it] Claim 1, wherein said structured surface consists of metal or plastic.

6. (Amended) Ultraphobic surface according to Claim 5, [characterized in that] wherein the metal is [chosen from the series] selected from the group consisting of beryllium,

magnesium, scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, aluminum, gallium, yttrium, zirconium, niobium, molybdenum, technetium, ruthenium, rhenium, palladium, silver, cadmium, indium, tin, lanthanum, cerium, praseodymium, neodymium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, hafnium, tantalum, tungsten, rhenium, osmium, iridium, platinum, gold, thallium, lead, bismuth, [in particular titanium,] aluminium, magnesium [and], nickel [or] and an alloy of said metals.

7. (Amended) Ultraphobic surface according to Claim 5, [characterized in that] wherein the metal is an aluminium-magnesium alloy, in particular $AlMg_3$.

8. (Amended) Ultraphobic surface according to Claim 5, [characterized in that] wherein the plastic is a thermosetting or thermoplastic polymer.

9. (Amended) Ultraphobic surface according to Claim 8, [characterized in that] wherein the thermosetting polymer is [chosen from the series:] selected from the group consisting of diallyl phthalate resin, epoxy resin, urea-formaldehyde resin, melamine-formaldehyde resin, melamine-phenol-formaldehyde resin, phenol-formaldehyde resin, polyimide, silicone rubber, [and] unsaturated polyester resin and mixtures of said polymers [and the thermoplastic polymer is chosen from the series: thermoplastic polyolefin, e.g. polypropylene or polyethylene, polycarbonate, polyester carbonate, polyester (e.g. PBT or PET), polystyrene, styrene copolymer, SAN resin, rubber containing styrene graft copolymer, e.g., ABS polymer, polyamide, polyurethane, polyphenylene sulphide, polyvinyl chloride or any possible mixtures of said polymers].

10. (Amended) Ultraphobic surface according to [one of Claims 1 to 9 characterized in that] Claim 1, wherein the surface has a coating with a hydrophobic phobicization auxiliary[, in particular an anionic, cationic, amphoteric or nonionic, interface-active

compound].

11. (Amended) Material or construction material [having] comprising an ultraphobic surface according to [one of Claims 1 to 10] Claim 1.

12. (Amended) [Use of the ultraphobic surface according to one of Claims 1 to 10 for the] A friction-reducing lining of vehicle bodies, aircraft fuselages or hulls of ships comprising the hydrophobic surface as claimed in claim1.

13. (Amended) [Use of the ultraphobic surface according to one of Claims 1 to 10 as] A self-cleaning coating or panelling of building structures, roofs, windows, ceramic construction material[, e.g., for sanitary installations, household appliances] comprising the ultraphobic surface claimed in Claim 1.

14. (Amended) [Use of the ultraphobic surface according to one of Claims 1 to 10 as an] An antirust coating of metal objects comprising the ultraphobic surface claimed in Claim 1.

15. (Amended) [Use of the ultraphobic surface according to one of Claims 1 to 10 as a] A transparent sheet [or as] a topcoat of transparent sheets[, in particular glass or plastic sheets, in particular for solar cells, vehicles or greenhouses] comprising the ultraphobic surface claimed in Claim 1.

16. (Amended) Process for the preparation of a surface having ultraphobic properties according to [one of Claims 1 to 10] claim 1 based on an $AlMg_3$ alloy, [characterized in that the surface is cleaned, pickled, anodically iodized, passivated in boiling water, optionally coated] comprising cleaning, pickling, anodically oxidating, passivating in boiling water, and optionally coating with a noble metal as an adhesion promoter, [in particular with gold with a layer thickness of from 10 to 100 nm, in particular by atomization, and coated] and coating with a hydrophobic material[, in particular with an anionic, cationic, amphoteric or nonionic,

interface-active compound as phobicization auxiliary].

17. (Amended) Process for the preparation of a surface having ultraphobic properties [by moulding, characterized in that] comprising molding, wherein a mould, which has the negative of a surface topography suitable for an ultraphobic surface, is moulded with a mixture of a plastic and a hydrophobic [or, in particular, oleophobic] additive, which separates out upon curing as a thin film between the surface of the mould and the plastic moulding.

18. (Amended) Process for the preparation of a surface having ultraphobic properties [by moulding, characterized in that the] comprising moulding a surface of a positive mould, which has a surface structure suitable for an ultraphobic surface, [is moulded] with a plastic, [in particular a thermosetting or thermoplastic polymer,] and the surface of the resulting moulding having the negative impression of the surface of the positive mould is optionally provided with an adhesion promoter layer and then with a hydrophobic [or, in particular, oleophobic] coating.

19. (Amended) Process according to Claim 18, [characterized in that] wherein the plastic [the polymer used] is a hydrophobic polymer, [preferably poly(methyl) methacrylate-co-perfluorooctadecyl methacrylate),] and the additional coating with hydrophobic or oleophobic material is optionally omitted.

20. (Amended) Process according to Claim 17 [or 18, characterized in that the mould used is], wherein the mould is the negative [or positive] of the surface structure of a pickled, anodized surface [comprising] consisting essentially of aluminium or an aluminium alloy and treated with hot water at from 50 to 100°C.

21. (Amended) Process according to Claim 17 [or 18, characterized in that the mould used], wherein the mould is the negative [or positive] of the surface structure of a

microstructured, anodized, calcined surface [comprising] consisting essentially of aluminum or an aluminium alloy.

22. (Amended) Process according to [one of Claims 17 to 21, characterized in that] Claim 17, wherein the plastic used for the moulding is a thermosetting polymer or a thermoplastic polymer.

23. (Amended) Process according to Claim 22, [characterized in that] wherein the thermosetting polymer is [chosen from the series:] selected from the group consisting of diallyl phthalate resin, epoxy resin, urea-formaldehyde resin, melamine-formaldehyde resin, melamine-phenol-formaldehyde resin, phenol-formaldehyde resin, polyimide, silicone rubber and unsaturated polyester resin.

24. (Amended) Process according to Claim 22, [characterized in that] wherein the thermoplastic polymer is [chosen from the series:] selected from the group consisting of thermoplastic polyolefin, [e.g.] polypropylene [or], polyethylene, polycarbonate, polyester carbonate, polyester, [(e.g.] PBT [or], PET[)], polystyrene, styrene copolymer, SAN resin, rubber-containing styrene graft copolymer, [e.g.] ABS polymer, polyamide, polyurethane, polyphenylene sulphide, polyvinyl chloride [or any possible] and mixtures of said polymers.

25. (Amended) Process according to [one of Claims 17 to 24 characterized in that] Claim 17, wherein the surface of the moulding with the impression has a coating with a hydrophobic phobicization auxiliary, [in particular an anionic, cationic, amphoteric or nonionic, interface-active compound,] or [such a] phobicization auxiliary which hydrophobicizes the surface is used as additive to polymers compatible therewith.

26. (Amended) A method [Method] of testing a surface[s] for ultraphobic properties, [characterized in that the surface is coated in particular by vapour deposition] comprising coating the surface with a noble metal or GaAs as adhesion promoter, [in particular with gold,

in particular in a layer thickness of from 10 to 100 nm, is coated] further coating with a phobicization auxiliary, [preferably with decanethiol,] then analyzing the surface topography [is analysed, in particular using a combination of scanning tunneling microscopy, scanning atomic force microscopy, white light interferometry] and, from the measured data, the spatial frequencies f and their structure amplitudes a(f), and the integral of the function S

$$S(\log F)=a(f)\cdot f \qquad (1)$$

calculated between the integration limits $\log(f_1/\mu m^{-1})=-3$ and $\log(f_2\mu m^{-1})=3$ is formed.

Claims 27-51 (New).